

REMARKS

Claims 1-62 are pending in this application. Claims 39, 43, 48, 52, 58, and 62 have been allowed. Claims 1, 36-38, and 40-42 have been amended to recite the polyester is not derived from a polyoxyalkylene glycol. Support for the amendment can be found in the specification at, *inter alia*, page 4, lines 26-28, which recites the polyesters derived from polyoxyalkylene glycols are useful in the invention. Polyesters derived from polyoxyalkylene glycol have been disclaimed from claims 1, 36-38, and 40-42. The disclaimer has support under 35 U.S.C. § 112, second paragraph in view of the specification. *See In re Johnson*, 558 F.2d 1008 (C.C.P.A. 1977), where the Board held that the disclaimer of a species from a genus claim where the species was disclosed in the application is permissible.

Rejections under 35 U.S.C. § 103

The Office Action has rejected claims 1-13, 15-24, 26-38, 40-42, 44-47, 49-51, 53-57, and 59-61 as being unpatentable over U.S. Patent No. 5,073,442 to Knowlton *et al.* in view of U.S. Patent No. 4,116,885 to Derstadt *et al.* under 35 U.S.C. § 103. The Office Action asserts that it would have been obvious to one of ordinary skill in the art to combine the polyesters and aluminosilicates (zeolite) disclosed in Derstadt *et al.* with the composition of Knowlton *et al.*, namely the modified wax emulsion, to render the present invention unpatentable. Applicants respectfully traverse the rejection.

In order to establish a *prima facie* case of obviousness, three basic criteria must be met (M.P.E.P. 2143).¹ First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

¹ Although a *prima facie* case of obviousness was not explicitly raised in the Office Action, Applicants will show that each requirement is not satisfied.

The first two requirements were addressed in the response dated November 20, 2006. However, they will be addressed below for the sake of completeness. Derstadt *et al.* discloses detergent compositions for removing oily soils from hydrophobic fibers such as polyester. The detergent composition contains a soil release polymer composed of ethylene terephthalate groups and polyethylene oxide terephthalate groups. *See* column 4, lines 30-45. Derstadt *et al.* teaches “the addition of polyoxyethylene moieties to this hydrophobic portion tends to increase the water-solubility of the molecule as a whole.” *See* column 7, lines 65-67.) Derstadt *et al.* further discloses:

Since polyester and polyester blend fabrics, such as polyester/cotton blends, are popular and are susceptible to oily staining, manufacturers of polyester fibers and fabrics have sought to increase the hydrophilic character of the polyester, in order to provide ease of laundering for the consumer.

Column 2, lines 3-8.

Thus, it was known in the art to increase the release of oily stains from hydrophobic fibers such as polyester by making the fibers more hydrophilic.

The polyesters disclosed in Derstadt *et al.* are specifically composed of ethylene terephthalate groups and polyethylene oxide terephthalate groups. These are the only polyesters disclosed in Derstadt *et al.* The polyethylene oxide terephthalate groups impart hydrophilic character (*i.e.*, water solubility) to the polyester. This is a required feature of the polyester because according to Derstadt *et al.*, the object of the invention is “to provide detergent compositions which inhibit the redeposition of soils onto fabrics during the laundering operation, and which additionally enhance the water absorption capacity of polyester garments.” *See* column 3, lines 33-37. Indeed, Milease T, a preferred polyester disclosed in Derstadt *et al.*, is a hydrophilic polymer. Enclosed in Exhibit A is product information about Milease T from Clariant, the manufacturer of Milease T. It is indicated in Exhibit A that Milease T is a hydrophilic polymer.

Although Knowlton *et al.* and Derstadt *et al.* are generally related to soil- and stain-release, the methods for achieving these results are very different. In Knowlton *et al.*,

hydrophobic materials such as modified wax emulsions are applied to fibers to increase the hydrophobicity of the fibers such that to prevent liquid spills from penetrating the fabric and subsequently staining the fabric. Indeed, Knowlton *et al.* teaches hydrophobic materials such as fluorochemicals improve oil and water repellency and antisoiling properties. Thus, Knowlton *et al.* motivates one of ordinary skill in the art to increase the hydrophobicity of fibers to impart soil- and stain-resistance.

The present invention as recited in claims 1-38, 40-42, 44-47, 49-51, 53-57, and 59-61 recite the polyester is not derived from a polyoxyalkylene glycol, which are hydrophilic polymers. The polyesters disclosed in Derstadt *et al.* have polyethylene oxide terephthalate groups, which do not fall under the polyesters of the claimed invention. Specifically, the polyethylene oxide terephthalate groups disclosed in Derstadt *et al.* are derived from polyethylene oxide glycol, which is a polyoxyalkylene glycol. In view of the disclosures of Knowlton *et al.* and Derstadt *et al.*, one of ordinary skill in the art would not have been motivated to incorporate the hydrophilic polyesters disclosed in Derstadt *et al.* with the compositions of Knowlton *et al.* First, there is no suggestion or teaching in Knowlton *et al.* to use polyesters. Moreover, there is no motivation in Knowlton *et al.* to use the hydrophilic polyesters disclosed in Derstadt *et al.* and disclaimed from claims 1-38, 40-42, 44-47, 49-51, 53-57, and 59-61. Indeed, one of ordinary skill in the art would not have an expectation of success if the hydrophilic polyesters disclosed in Derstadt *et al.* were combined with the hydrophobic materials of Knowlton *et al.* If the polyesters disclosed in Derstadt *et al.* were incorporated into the compositions of Knowlton *et al.*, the hydrophobicity of the Knowlton *et al.* compositions would decrease and, thus, reduce soil- and stain-resistance of the fiber. In summary, (1) there is no suggestion or motivation in Knowlton *et al.* to use polyesters in general and specifically those recited in claims 1-38, 40-42, 44-47, 49-51, 53-57, and 59-61 and (2) there would be no reasonable expectation of success if the polyesters disclosed in Derstadt *et al.* were used in combination with the compositions of Knowlton *et al.*

Assuming, *arguendo*, the polyesters disclosed in Derstadt *et al.* were combined with the compositions of Knowlton *et al.*, the combined teachings of Derstadt *et al.* and Knowlton *et al.*

ATTORNEY DOCKET NO. 24A01.1-040
PATENT

do not teach or suggest all the claim limitations of claims 1-38, 40-42, 44-47, 49-51, 53-57, and 59-61. As discussed above, claims 1-38, 40-42, 44-47, 49-51, 53-57, and 59-61 recite the polyester is not derived from a polyoxyalkylene glycol. Derstadt *et al.* only discloses polyesters composed of ethylene terephthalate groups and polyethylene oxide terephthalate groups. In the absence of any other teaching or suggestion in Derstadt *et al.* to use other polyesters that are not derived from a polyoxyalkylene glycol, the combined teachings of Derstadt *et al.* and Knowlton *et al.* do not produce the claimed invention. For this reason and the arguments presented above, the present invention as recited in claims 1-13, 15-24, 26-38, 40-42, 44-47, 49-51, 53-57, and 59-61 would not have been *prima facie* obvious in view of the combined teachings of Derstadt *et al.* and Knowlton *et al.*

The Office Action has rejected claim 14, which is dependent upon claim 1, as being unpatentable under 35 U.S.C. § 103 over Knowlton *et al.* and Derstadt *et al.* as applied to claims 1-13, 15-24, 26-38, 40-42, 44-47, 49-51, 53-57, and 59-61 further in view of U.S. Published Application No. 2002/0142937 to Carter *et al.* As discussed above, even if the polyesters disclosed in Derstadt *et al.* were combined with the compositions of Knowlton *et al.*, the present invention still would not have been obvious. Moreover, Carter *et al.* is silent with respect to using polyesters, particularly those of the present invention. Therefore, applicants respectfully request the rejection of claim 14 be withdrawn.

CONCLUSION

Pursuant to the above remarks, reconsideration and allowance of the pending application is believed to be warranted. The Examiner is invited and encouraged to directly contact the undersigned if such contact may enhance the efficient prosecution of this application to issue.

No fee is believed to be due; however, the Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment to Deposit Account No. 50-1513.

Respectfully submitted,
GARDNER GROFF
SANTOS & GREENWALD, P.C.

/Lawrence A. Villanueva/
Lawrence A. Villanueva, J.D., Ph.D.
Registration No. 43,968

GARDNER GROFF
SANTOS & GREENWALD, P.C.
Customer Number 23506
100 Parkwood Point
2018 Powers Ferry Road
Suite 800
Atlanta, Georgia 30339
Tel: 770.984.2300
Fax: 770.984.0098